

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	63	"image topology"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:01
S2	26	S1 & xml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/28 19:12
S3	156	"image hierarchy"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:03
S4	7	S3 & xml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/28 19:25
S5	31	"image hierarchy" & tree	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/28 19:29
S6	292	"image tree"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:01
S7	0	S6 & sml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:02
S8	16	S6 & xml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:03
S9	0	S8 & bitmap	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:04

EAST Search History

S10	18377	bitmap	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:04
S11	1482	S10 & xml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:04
S12	10	S11 & "image structure"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:04
S13	169	bitmap same xml	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/29 10:48

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Relevance scale

1 [Hypermedia and Graphics 2: Vector graphics: from PostScript and Flash to SVG](#)

Steve Probets, Julius Mong, David Evans, David Brailsford

November 2001 **Proceedings of the 2001 ACM Symposium on Document engineering****Publisher:** ACM PressFull text available: [pdf\(127.00 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The XML-based specification for Scalable Vector Graphics(SVG), sponsored by the World Wide Web consortium, allows for compact and descriptive vector graphics for the Web. This paper describes a set of three tools for creating SVG, either from first principles or via the conversion of existing formats. The *ab initio* generation of SVG is effected from a server-side CGI script, using a PERL library of drawing functions; later sections highlight the problems of converting Adobe PostScript and ...

Keywords: Flash, PDF, PostScript, SVG, SWF**2 [Web and e-business application: A Java based XML browser for consumer devices](#)**

Petri Vuorimaa, Teemu Ropponen, Niklas von Knorring, Mikko Honkala

March 2002 **Proceedings of the 2002 ACM symposium on Applied computing****Publisher:** ACM PressFull text available: [pdf\(918.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Next generation consumer devices will all have an Internet connection. Thus, one vision is that the future multimedia services will be browser based. Extensible Markup Language (XML) is the most likely markup language. In this paper, we introduce a Java based XML browser called X-Smiles. It is intended for consumer devices and supports multimedia services. The main advantage of the X-Smiles browser is that it supports most of the XML related specifications. Different XML based languages can be m ...

Keywords: SMIL, SVG, XML, XSL FO, multimedia**3 [Applications: Augmenting reality with geo-referenced information for environmental management](#)**

Teresa Romão, Eduardo Dias, José Danado, Nuno Correia, Adelaide Trabuco, Carlos Santos,

Rossana Santos, Edmundo Nobre, António Câmara, Luís Romero
 November 2002 **Proceedings of the 10th ACM international symposium on Advances in geographic information systems**

Publisher: ACM Press

Full text available:  pdf(372.05 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

When interacting with natural or urban environments there are many situations where the ability to access data in real time becomes relevant. Augmented Reality (AR) technologies allow real time superimposition of synthetic objects on real images, providing an augmented knowledge about the surrounding world. Using a Head Mounted Display, the user of an AR system can visualize the exterior world with additional virtual information that is generated in real time and in a contextual way. This paper p ...

Keywords: augmented reality, contextual information, geo-referenced information, image retrieval based on content, mobile information services, positioning, real-time spatio-temporal geographical information

4 Indexing and searching: Spatial relationship modeling and indexing for XML



multimedia data retrieval

Byungwoo Kim, Venu Chakilam, Jong P. Yoon

September 2001 **Proceedings of the 2001 ACM workshops on Multimedia: multimedia information retrieval**

Publisher: ACM Press

Full text available:  pdf(332.90 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Multimedia information becomes available for many sources around the world exponentially; man people would like to use this information for various purposes, making the multi media database to be accessed by many users. This challenging situation led to the need for a solution that quickly and efficiently searches for and/or filters various types of multimedia information of user interest. MPEG-7 is a multimedia content description standard that describes multimedia contents so users can search, ...

5 Novel interaction modalities I: The connected user interface: realizing a personal



situated navigation service

Antonio Krüger, Andreas Butz, Christian Müller, Christoph Stahl, Rainer Wasinger, Karl-Ernst Steinberg, Andreas Dirschl

January 2004 **Proceedings of the 9th international conference on Intelligent user interface**

Publisher: ACM Press

Full text available:  pdf(15.31 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Navigation services can be found in different situations and contexts: while connected to the web through a desktop PC, in cars, and more recently on PDAs while on foot. These services are usually well designed for their specific purpose, but fail to work in other situations. In this paper we present an approach that connects a variety of specialized user interfaces to achieve a personal navigation service spanning different situations. We describe the concepts behind the \bf BPN (BMW Personal N ...

Keywords: pedestrian navigation systems, ubiquitous interfaces

6 A personal digital store



Gordon Bell

January 2001 **Communications of the ACM, Volume 44 Issue 1**

Publisher: ACM Press

Full text available:  pdf(289.88 KB)

 html(33.91 KB)

Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

7 Live documents with contextual, data-driven information components



 Anke Weber, Holger M. Kienle, Hausi A. Müller

October 2002 **Proceedings of the 20th annual international conference on Computer documentation**

Publisher: ACM Press

Full text available:  pdf(627.10 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

We introduce the notion of a live document and we describe our concept of live documents with contextual, data driven information components. The dynamic and interactive features of live documents provide a consistent data source for multimedia presentations targeted to various audiences and multiple platforms. Therefore, they contribute to the solution of key challenges in single sourcing and repurposing. We motivate the use of live documents with sample scenarios from the field of systems docu ...

Keywords: Microsoft Office, live documents, repurposing, reverse engineering, scalable vector graphics, single sourcing, software engineering, systems documentation

8 An application of a context-aware file system



Christopher K. Hess, Roy H. Campbell

December 2003 **Personal and Ubiquitous Computing**, Volume 7 Issue 6

Publisher: Springer-Verlag

Full text available:  pdf(383.26 KB) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

Ubiquitous computing environments stretch the requirements of traditional infrastructures used to facilitate the development of applications. Activities are often supported by collections of applications, some of which are automatically launched with little or no human intervention. This task-driven environment challenges existing application construction and data management techniques. In this paper, we describe a file system that organises application data based on contextual information, impo ...

Keywords: Context, Data management, File systems, Operating systems, Ubiquitous computing spaces

9 Software engineering and the Internet: a roadmap



 Luca Bompiani, Paolo Ciancarini, Fabio Vitali

May 2000 **Proceedings of the Conference on The Future of Software Engineering**

Publisher: ACM Press

Full text available:  pdf(1.73 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

10 Interaction in the real world: The missing link: augmenting biology laboratory



 notebooks

Wendy E. Mackay, Guillaume Pothier, Catherine Letondal, Kaare Bøegh, Hans Erik Sørensen
October 2002 **Proceedings of the 15th annual ACM symposium on User interface software and technology**

Publisher: ACM Press

Full text available: [pdf\(814.78 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)
[mov\(258.00 bytes\)](#) [wmv\(258.00 bytes\)](#)

Using a participatory design process, we created three prototype augmented laboratory notebooks that provide the missing link between paper, physical artifacts and on-line data. The final *a-book* combines a graphics tablet and a PDA. The tablet captures writing on the paper notebook and the PDA acts as an "interaction lens" or window between physical and electronic documents. Our approach is document-centered, with a software architecture based on layers of physical and electronic informat ...

Keywords: SVG, a-book, augmented laboratory note-books, augmented reality, information layers, interaction lens, interactive paper

11 Augmenting recommender systems by embedding interfaces into practices



Antonietta Grasso, Michael Koch, Alessandro Rancati

November 1999 **Proceedings of the international ACM SIGGROUP conference on Supporting group work**

Publisher: ACM Press

Full text available: [pdf\(1.36 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Automated collaborative filtering systems promote the creation of a meta-layer of information, which describes users' evaluations of the quality and relevance of information items like scientific papers, books, and movies. A rich meta-layer is required, in order to elaborate statistically good predictions of the interest of the information items; the number of users' contributing to the feedback is a vital aspect for these systems to produce good prediction quality. The work presented here, ...

Keywords: paper interface, recommender system

12 Image Retrieval from the World Wide Web: Issues, Techniques, and Systems



M. L. Kherfi, D. Ziou, A. Bernardi

March 2004 **ACM Computing Surveys (CSUR)**, Volume 36 Issue 1

Publisher: ACM Press

Full text available: [pdf\(294.13 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

With the explosive growth of the World Wide Web, the public is gaining access to massive amounts of information. However, locating needed and relevant information remains a difficult task, whether the information is textual or visual. Text search engines have existed for some years now and have achieved a certain degree of success. However, despite the large number of images available on the Web, image search engines are still rare. In this article, we show that in order to allow people to profit ...

Keywords: Image-retrieval, World Wide Web, crawling, feature extraction and selection, indexing, relevance feedback, search, similarity

13 Papers: An automated oracle for verifying GUI objects



July 2001 **ACM SIGSOFT Software Engineering Notes**, Volume 26 Issue 4

Publisher: ACM Press

Full text available: [pdf\(570.79 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#), [review](#)

Recently, software testers have relied more on automated testing to test software. Automated testing method consists of the three modules: test case design, execution, and verification. Yet, to accomplish these three phases, we are always in a dilemma due to a lack of a verification function. Nearly all the commercial automated testing tools cannot efficiently compare graphic objects though GUI (Graphic User Interface) software is now more crucial than text based user interface. This research de ...

Keywords: GUI testing, Software testing, automated testing

14 Context-sensitive electronic dictionaries

Gábor Próséky, Balázs Kis

August 2002 **Proceedings of the 19th international conference on Computational linguistics - Volume 2**

Publisher: Association for Computational Linguistics

Full text available:  [pdf\(64.18 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

This paper introduces a context-sensitive electronic dictionary that provides translations for any piece of text displayed on a computer screen, without requiring user interaction. This is achieved through a process of three phases: text acquisition from the screen, morpho-syntactic analysis of the context of the selected word, and the dictionary lookup. As with other similar tools available, this program usually works with dictionaries adapted from one or more printed dictionaries. To implement ...

15 XML linking

 Steven J. DeRose

December 1999 **ACM Computing Surveys (CSUR)**

Publisher: ACM Press

Full text available:  [pdf\(154.81 KB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

16 Designing and mining multi-terabyte astronomy archives: the Sloan Digital Sky

 Survey

Alexander S. Szalay, Peter Z. Kunszt, Ani Thakar, Jim Gray, Don Slutz, Robert J. Brunner

May 2000 **ACM SIGMOD Record , Proceedings of the 2000 ACM SIGMOD international conference on Management of data SIGMOD '00, Volume 29 Issue 2**

Publisher: ACM Press

Full text available:  [pdf\(429.09 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The next-generation astronomy digital archives will cover most of the sky at fine resolution in many wavelengths, from X-rays, through ultraviolet, optical, and infrared. The archives will be stored at diverse geographical locations. One of the first of these projects, the Sloan Digital Sky Survey (SDSS) is creating a 5-wavelength catalog over 10,000 square degrees of the sky (see <http://www.sdss.org/>). The 200 million objects in the multi-terabyte database will have mostly numerical attribut ...

Keywords: Internet, archive, astronomy, data analysis, data mining, database, scalable

17 Containment and equivalence for a fragment of XPath

 Gerome Miklau, Dan Suciu

January 2004 **Journal of the ACM (JACM), Volume 51 Issue 1**

Publisher: ACM Press

Full text available:  [pdf\(367.27 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index](#)

terms, review

XPath is a language for navigating an XML document and selecting a set of element nodes. XPath expressions are used to query XML data, describe key constraints, express transformations, and reference elements in remote documents. This article studies the containment and equivalence problems for a fragment of the XPath query language, with applications in all these contexts. In particular, we study a class of XPath queries that contain branching, label wildcards and can express descendant relation ...

Keywords: Tree pattern matching, XPath expressions, query containment, query equivalence

18 Document formatting: Creating reusable well-structured PDF as a sequence ofcomponent object graphic (COG) elements

◆ Steven R. Bagley, David F. Brailsford, Matthew R. B. Hardy
November 2003 **Proceedings of the 2003 ACM symposium on Document engineering**

Publisher: ACM Press

Full text available: pdf(458.01 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Portable Document Format (PDF) is a page-oriented, graphically rich format based on PostScript semantics and it is also the format interpreted by the Adobe Acrobat viewers. Although each of the pages in a PDF document is an independent graphic object this property does not necessarily extend to the components (headings, diagrams, paragraphs etc.) within a page. This, in turn, makes the manipulation and extraction of graphic objects on a PDF page into a very difficult and uncertain process. The wo ...

Keywords: PDF, form Xobjects, graphic objects, tagged PDF

19 ViBE: virtual biology experiments

◆ Rajaram Subramanian, Ivan Marsic
April 2001 **Proceedings of the 10th international conference on World Wide Web**

Publisher: ACM Press

Full text available: pdf(446.09 KB) Additional Information: [full citation](#), [references](#), [index terms](#)

Keywords: distributed learning, software design, virtual laboratories

20 BIIF, VRML and CGM

◆ Bernadette Kuzma, George S. Carson, Richard F. Puk, John Gebhardt
May 1999 **ACM SIGGRAPH Computer Graphics**, Volume 33 Issue 2

Publisher: ACM Press

Full text available: pdf(1.58 MB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

This edition of the Standards Pipeline consists of three articles that provide an in-depth look at applications of three important international standards. In the first article, Bernadette Kuzma of SEMCOR, Inc. describes the Basic Image Interchange Format (BIIF) formally known as ISO/IEC 12087-5:1998. While BIIF originated in the defense community, it is beginning to find wider applications in areas ranging from electronic libraries to medical imaging. In the second article, Richard F. Puk of In ...

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